Cyclosporiasis

Agent: Cyclospora cayetanensis (parasite)

<u>Mode of Transmission</u>: Can be spread by ingesting food or water contaminated with *Cyclospora*. *Cyclospora* are resistant to chlorine and iodine treatment and are unlikely to be killed by routine chemical disinfection or sanitizing methods. Direct person-to-person transmission has not been documented.

<u>Signs/Symptoms</u>: Profuse watery diarrhea commonly occurs, along with nausea, anorexia, substantial weight loss, abdominal bloating or cramping, increased gassiness and prolonged fatigue. Low-grade fever and vomiting are uncommon but can occur. Some infected persons are asymptomatic, particularly in settings where cyclosporiasis is endemic. If not treated, symptoms can persist for a month or more.

<u>Prevention</u>: Fresh produce should be washed thoroughly before it is consumed. No vaccine for cyclosporiasis is available.

Other Important Information: *C. cayetanensis* is known to be endemic in many resource-limited countries and has been reported as a cause of traveler's diarrhea. Most outbreaks reported in the U.S. have been associated with the consumption of imported fresh produce, including raspberries, basil, cilantro, snow peas and lettuce. No commercially frozen or canned produce has been implicated as the source of an outbreak.

Cyclosporiasis: 2016 Data Summary	
Number of Cases:	11
5-Year Average Number of Cases:	3.8
% Change from 5-Year Average:	+189%
Incidence Rate per 100,000:	0.1

During 2016, 11 cases of cyclosporiasis were reported in Virginia, representing a 38% increase from the eight cases reported in 2016 and a 189% increase from the five-year average of 3.8 cases per year. All cases occurred among adults (age range: 23 to 81 years). Eight cases were in females and three cases were in males.

Geographically, the northern region had the highest number of *Cyclospora* infections with seven, followed by the northwest region with three cases, and central region with one case. Seven of the patients traveled internationally during their exposure period. Most cases and outbreaks of cyclosporiasis in the U.S. occur in spring and summer months, but not all cases identified during the same time of year are caused by the same exposure. During 2016, all cases in Virginia occurred during June and August.

Changes in diagnostic testing may affect the number of reported cases of cyclosporiasis. Prior to the current widespread use of molecular testing methods, testing for *Cyclospora* would need to be specifically requested, and the testing required special microscopy methods. Test type was known for nine of the reported cases in 2016, and seven were diagnosed by a molecular gastrointestinal illness panel test. The remaining two cases of cyclosporiasis were diagnosed by traditional microscopy methods.